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YJS 12/27/2007.  
BRIAN SINES  
PRIMARY EXAMINER

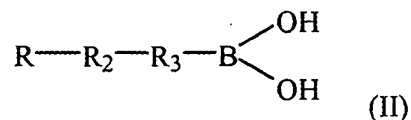
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1-11. (Canceled)

~~12.~~<sup>1</sup> (Previously Presented) An analyte detector comprising:  
a field effect transistor having a gate surface; and  
a monolayer of molecules, each molecule bonded to the gate surface, the molecules  
having a structure (II):



wherein,

R is a ligand bonded to the gate surface;

R<sub>2</sub> is a (C<sub>10</sub> - C<sub>24</sub>) alkylene, or (C<sub>10</sub> - C<sub>24</sub>) alkenylene; and

R<sub>3</sub> is an (C<sub>3</sub> - C<sub>14</sub>) cycloalkylene, (C<sub>3</sub> - C<sub>14</sub>) heterocyclylene, (C<sub>3</sub> - C<sub>24</sub>) arylene, or (C<sub>3</sub> - C<sub>14</sub>) heteroarylene.

~~2~~<sup>1</sup>~~13.~~ (Original) The analyte detector according to claim ~~1~~<sup>1</sup>, wherein R<sub>2</sub> is a (C<sub>10</sub> - C<sub>20</sub>) alkylene.

~~3~~<sup>1</sup>~~14.~~ (Original) The analyte detector according to claim ~~1~~<sup>1</sup>, wherein R<sub>3</sub> is a phenylene or naphthalene.

~~4~~<sup>1</sup>~~15.~~ (Original) The analyte detector according to claim ~~1~~<sup>1</sup>, wherein the ligand is thiol, phosphate, or siloxane.

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Amendment filed December 21, 2007

5/6. (Original) The analyte detector according to claim 1/1, wherein the gate surface is a conducting surface.

6/6. (Original) The analyte detector according to claim 1/1, wherein the gate surface is a non-continuous conducting surface of the field effect transistor, and the monolayer of molecules form a non-conducting layer on the semi-conducting surface.

7/6. (Original) The analyte detector according to claim 1/1, wherein the gate surface is an insulating surface.

19-34. (Canceled)